

What is claimed is:

1. A method of forming an ophthalmic lens from a hydrophobic acrylic polymer composition comprising the steps of:
  - (a) forming a pre-polymer gel from a hydrophobic acrylic polymer;
  - (b) forming at least the optical portion of said ophthalmic lens from said pre-polymer gel in a fused silica mold; and
  - (c) extracting said ophthalmic lens or its optical portion formed in step (b) such that the extracted lens remains transparent in an aqueous medium.
2. The method of Claim 1 wherein said ophthalmic lens is an intraocular lens.
3. The method of Claim 1 wherein said ophthalmic lens is a phakic refractive lens.
4. The method of Claim 1 wherein said ophthalmic lens is a cornea lens.
5. The method of Claim 1 wherein said hydrophobic acrylic polymer is a crosslinked homopolymer.
6. The method of Claim 5 wherein said homopolymer comprises a monomer selected from phenoxyethylacrylate, poly(ethyleneglycol) phenylethylacrylate, 2-phenylethylacrylate.
7. The method of Claim 5 wherein said homopolymer is crosslinked with at least one crosslinker.
8. The method of Claim 7 wherein said crosslinker contains a rigid structure group.

9. The method of Claim 8 wherein said crosslinker is selected from diacrylates and dimethacrylates of bisphenol A ethoxylate (1 EO/phenol), bisphenol A ethoxylate (2 EO/phenol), bisphenol A propoxylate (2 PO/phenol), bisphenol A, 2,2'-diallylbisphenol A, bis(4-(2-acryloyloxy) phenyl)methane, 5 bis(4-2-methacryloyloxy)phenyl)methane, bis (naphthol) A ethoxylate (X EO/naphthol), bis(2-acryloylalkylphenyl)propane, bis(2-methacryloylalkylphenyl)propane, and 3,3'-(ethylenedioxy) diphenyl A ethoxylate (X EO/phenol), and mixtures thereof, wherein X = 1 to 5.

10. The method of Claim 5 wherein said homopolymer contains a UV absorber.

11. The method of Claim 10 wherein said UV absorber is selected from 2-(4-benzoyl-3-hydroxyphenoxy)ethyl acrylate, 2-hydroxy-4-allyloxybenzophenone, 2-(2'-hydroxy-5-acryloxyethylphenyl) -2H-benzotriazole, and 2-(2'-hydroxy-5-methacryloxyethylphenyl) -2H-benzotriazole, and mixtures thereof.

12. The method of Claim 1 wherein said hydrophobic acrylic polymer is a crosslinked copolymer.

13. The method of Claim 12 wherein said copolymer comprises at least one monomer selected from phenoxyethylacrylate, poly(ethyleneglycol) phenylethylacrylate, 2-phenylethylacrylate, phenoxyethylmethacrylate, poly(ethyleneglycol) phenylethylmethacrylate, 2-phenylethylmethacrylate, 5 methylacrylate, methyl methacrylate, lauryl acrylate, lauryl methacrylate, stearyl acrylate, stearyl methacrylate, other alkyl acrylates and their derivatives, and other alkyl methacrylates and their derivatives.

14. The method of Claim 12 wherein said copolymer is crosslinked with at least one crosslinker.

15. The method of Claim 14 wherein said crosslinker is selected from diacrylates and dimethacrylates of bisphenol A ethoxylate (1 EO/phenol), bisphenol A ethoxylate (2 EO/phenol), bisphenol A propoxylate (2 PO/phenol), bisphenol A, 2,2'-diallylbisphenol A, bis(4-(2-acryloylethoxy) phenyl)methane, 5 bis(4-(2-methacryloylethoxy)phenyl)methane, bis (naphthol) A ethoxylate (X EO/naphthol), bis(2-acryloylalkylphenyl)propane, bis(2-methacryloylalkylphenyl)propane, 3,3'-(ethylenedioxy) diphenyl A ethoxylate (X EO/phenol), ethyleneglycol diacrylate, ethyleneglycol dimethacrylate, 1,3-propanediol diacrylate, 1,3-propanediol dimethacrylate, 1,4-butanediol 10 diacrylate, 1,4-butanediol dimethacrylate, 1,6-hexanediol diacrylate, 1,6-hexanediol dimethacrylate, allyl acrylate, allyl methacrylate, and mixtures thereof, wherein X = 1 to 5.

16. The method of Claim 12 wherein said copolymer contains a UV absorber.

17. The of method of Claim 16 wherein said UV absorber is selected from 2-(4-benzoyl-3-hydroxyphenoxy)ethyl acrylate, 2-hydroxy-4-allyloxybenzophenone, 2-(2'-hydroxy-5-acryloxyethylphenyl) -2H-benzotriazole, and 2-(2'-hydroxy-5-methacryloxyethylphenyl) -2H-benzotriazole, and mixtures thereof.

18. A method for forming a pre-polymer gel for molding of an ophthalmic lens made from a hydrophobic acrylic polymer composition and comprising (a) forming the pre-polymer gel which comprises a hydrophobic acrylic polymer with a number

average molecular weight of at least about 1 million; and (b) molding said polymer to  
5 form the lens.

19. The method of Claim 18 wherein said molecular weight is about 10 million.
20. A method of forming an ophthalmic lens from a hydrophobic acrylic polymer composition by molding said lens or at least its optical portion from said polymer composition in a fused silica mold.
21. The method of Claim 20 wherein prior to the molding operation, said fused silica mold is surface treated to form a thin coating on its surface to improve the releasing property of the mold for hydrophobic lenses.
22. The method of Claim 21 wherein the surface treatment reagent is trimethylchlorosilane.
23. The method of Claim 20 wherein said hydrophobic acrylic polymer composition is a crosslinked homopolymer.
24. The method of Claim 23 wherein said homopolymer further contains a UV absorber.
25. The method of Claim 20 wherein said hydrophobic acrylic polymer composition is a crosslinked copolymer.
26. The method of Claim 25 wherein said copolymer further contains a UV absorber.
27. The method of Claim 1 wherein the extraction process is an organic solvent extraction, such that the extracted lens, after being properly dried, remains transparent

in an aqueous medium after being soaked in the aqueous medium for at least about 72 hours at about 37°C.

28. The method of Claim 27 wherein, after soaking and drying, said ophthalmic lens has a light transmission in the visible wavelength of at least 80% in an aqueous medium at 37°C.

29. The method of Claim 27 wherein said ophthalmic lens is substantially free of glistenings.

30. The method of Claim 27 wherein said extracted lens is subsequently dried at a temperature below the boiling temperature of the organic solvent used for extraction.

31. The method of Claim 30 wherein said organic solvent is an alcohol.

32. The method of Claim 31 wherein said alcohol is ethyl alcohol.

33. The method of Claim 27 wherein said hydrophobic acrylic polymer composition is a crosslinked homopolymer.

34. The method of Claim 33 wherein said homopolymer further contains a UV absorber.

35. The method of Claim 27 wherein said hydrophobic acrylic polymer composition is a crosslinked copolymer.

36. The method of Claim 35 wherein said copolymer further contains a UV absorber.